policymakers from around the country to lay a foundation for an environmental health sciences curriculum for the kindergarten through 12th-grade classroom and was coordinated by Marian Johnson-Thompson, NIEHS director of Institutional Development.

Organizations with a scientific or educational mission are eligible to apply, such as colleges and universities, state and local education agencies, professional societies, museums, and research laboratories. Letters of intent are requested by September 20, and application must be received by November 15. Copies of the announcement of the request for applications are available from Michael J. Galvin, Environmental Health Resources Branch, Division of Extramural Research and Training, NIEHS, MD 3-02, PO Box 12233, Research Triangle Park, NC 27709 USA. Leave your name, address, and phone number on voice mail at (919) 541-3319 or FAX this information with your request to (919) 541-2843.

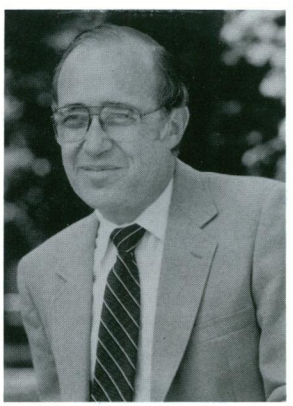
NIEHS Awards Grants on Health Effects of Ozone

Under the Clean Air Act Amendments of 1990, the NIEHS was directed to conduct a program of basic research related to the health effects of exposure to air pollution, particularly ozone. In mid-1992, NIEHS and its sister institute, the National Heart, Lung and Blood Institute, issued a request for applications to study the mechanisms of the health effects and risks associated with prolonged and/or intermittent, recurrent ozone exposure.

Five applications were recommended for approval for funding: Duke University, Harvard School of Public Health, North Carolina State University, University of California-Davis, and University of Cincinnati. The NHLBI council recommended approval for funding of an additional three applications: Johns Hopkins University, University of Rochester, and Lovelace Biomedical and Environmental Research Institute.

Goldstein Receives Kehoe Award of Merit

Bernard D. Goldstein, director of the Robert Wood Johnson/Rutgers Environmental Health Research Center, funded by NIEHS, received the 1993 Robert A. Kehoe Award of Merit from the American College of Occupational and Environmental Medicine at its annual meeting in April in Atlanta. Goldstein is the founding Director of the Environmental and Occupational Health Sciences Institute (EOHSI), jointly sponsored by Rutgers and the University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School, where he also chairs the Department of Environmental and Community Medicine. The award is in recognition of Goldstein's significant contributions to academic excellence and research in occupational and environmental medicine.



Bernard D. Goldstein, recipient of the Kehoe Award of Merit

"I am very pleased that Dr. Goldstein, who has been associated and worked with NIEHS since its inception, has received this award. It is recognition of his skill, concern, and leadership in the field of environmental health sciences," said Kenneth Olden, director of NIEHS.

The American College of Occupational and Environmental Medicine is an organization of more than 6500 physicians who promote worker and environmental health through preventive medicine, clinical care, research, and education. The award honors the late Robert A. Kehoe, a pioneer in the field of environmental medicine.

Molecular Interventions for Environmentally Induced Disease Prevention

NIEHS awarded grants to support research efforts aimed at the development and ultimate clinical use of methods to prevent, modulate, or treat environmentally induced toxic diseases. The focus of this research is development and use of appropriate biomarkers to study the effectiveness of intervention methods.

Five research proposals have been funded. Three focus on respiratory diseases resulting from environmental and occupational exposures. David Schwartz of the University of Iowa was awarded a grant to study grain dust, endotoxins, and airflow obstruction and other inflammatory processes in the lung. Patricia Finn at Brigham and Women's Hospital in Boston, Massachusetts, will study molecular markers for environmentally induced asthma. Lee Newman at the National Jewish Center for Respiratory Diseases in Denver, Colorado, will explore the role of cytokine biomarkers of environmental lung disease in beryllium-exposed workers.

Two other studies were funded dealing with prevention and treatment of effects of two important toxins, dioxins and lead. James Olson of the Research Foundation at the State University of New York at Buffalo will study biomarkers for dioxinlike compounds in human populations and animals studies. James Keogh from the University of Maryland School of Medicine will study biomarkers of dose and effect in adult lead poisoning to determine if they are useful in monitoring lead intervention therapy. These grants will help further the understanding of some important molecular mechanisms of these diseases as well as develop tools to assist in clinical treatment and intervention strategies to reduce disease burden.

Biotechnology Transfer to Epidemiology Studies in Cancer

A request for applications was jointly sponsored with the National Cancer Institute to promote an interdisciplinary approach to studying cancer etiology combining traditional epidemiologic methods with approaches from the laboratory to measure biological dose and susceptibility. Its aim was to validate and apply existing biomarkers in cancer epidemiologic research. NIEHS has funded four applications. These projects include a study of biomarkers of benzene exposure and genotoxicity by Martyn Smith, University of California at Berkeley; a study which explores the mutational spectra of aflatoxin in humans and rodents by Neal Cariello at the University of North Carolina; investigations on the molecular epidemiology of bladder cancer by Zuo-Feng Zhang at Sloan Kettering Institute for Cancer Research; and a study of biomarkers of the effects of ambient air pollution on women and their developing fetuses by Fredrica Perera at Columbia University. Scientists receiving these grants will meet annually with the grantees funded by NCI to discuss study progress and important findings from their work.